

71 2 1 90
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

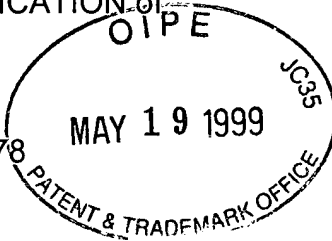
In re PATENT APPLICATION of

MILLS

Appln. No. 09/110,678

Filed: July 7, 1998

For: Inorganic Hydrogen Compounds
And Applications Thereof



Group Art Unit: Unknown

Examiner: Unknown

5/ Prior art with
E.A.
5-21-99

* * * * *

May 19, 1999

RECEIVED
JAN 19 2001
TO 1700 MAIL ROOM
GROUP 3600

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents
and Trademarks
Washington, D.C. 20231

RECEIVED
MAY 20 1999
GROUP 3600

Sir:

In accordance with 37 C.F.R. Section 1.56 enclosed is Form PTO/SB/08A, and
copies of the documents cited therein.

The Rule 17(p) Official Fee is not required since this IDS is being prior to the first
action on the merits. Should a first action on the merits issue with a mailing date which
precedes or is the same as the filing date of this IDS, please charge the Rule 17(p)

Mills — Appln. No. 09/110,678

official fee to our Deposit Account No. 50-0687 under Order No. 62-226 and proceed to consider this IDS.

This IDS is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to comply fully.

Consideration of the foregoing and enclosure plus the return of the enclosed Form PTO/SB/08A with the Examiner's initials in the left hand column per MPEP 609 are earnestly solicited.

RECEIVED

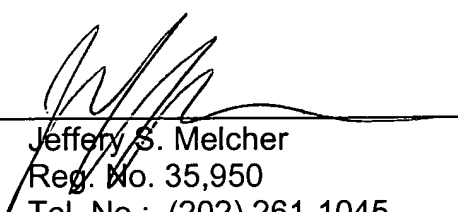
Respectfully submitted,

MAY 20 1999

FARKAS & MANELLI, PLLC

GROUP 3600

By


Jeffrey S. Melcher

Reg. No. 35,950

Tel. No.: (202) 261-1045

Fax. No.: (202) 887-0336

2000 M Street, N.W.
Suite 700
Washington, D.C. 20036-3307

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

MAY 19 1999

Complete if Known

| | | | | | |
|-------|---|----|----|------------------------|------------|
| Sheet | 1 | of | 14 | Attorney Docket Number | 62-226-8AC |
|-------|---|----|----|------------------------|------------|

U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | U.S. Patent Document | | Name of Patentee of Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | |
|-----------------------|--------------------------|----------------------|--------------------------------------|--|--|--|
| | | Number | Kind Code ² (if known) | | | |
| | | 1,001,589 | | Hatfield | 08-23-1911 | |
| | | 2,708,656 | | Fermi | 05-17-1955 | |
| | | 3,297,484 | | Niedrach | 01-10-1967 | |
| | | 3,300,345 | | Lyons | 01-24-1967 | |
| | | 3,359,422 | | Pollock | 12-19-1967 | |
| | | 3,377,265 | | Caeser | 04-09-1968 | |
| | | 3,448,035 | | Serfass | 06-03-1969 | |
| | | 3,669,745 | | Beccu | 06-13-1972 | |
| | | 3,701,632 | | Lovelock | 10-31-1972 | |
| | | 3,755,128 | | Herwig | 08-28-1973 | |
| | | 3,816,192 | | Brower | 06-11-1974 | |
| | | 3,835,019 | | Lovelock | 09-10-1974 | |
| | | 3,917,520 | | Katz | 11-04-1975 | |
| | | 4,265,720 | | Winstel | 05-05-1981 | |
| | | 4,274,938 | | Schulten | 06-23-1981 | |
| | | 4,487,670 | | Bellanger | 12-11-1984 | |
| | | 4,512,966 | | Nelson | 04-23-1985 | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3) ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

[illegible]

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3) ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| | | | | | |
|---|---|----|----|--------------------------|--------------|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 3 | of | 14 | Attorney Docket Number | 62-226-8AC |

| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|--------------------------|----------------------|--------------------------------------|--|--|--|
| Examiner Initials* | Cite No. ¹ | U.S. Patent Document | | Name of Patentee of Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number | Kind Code ⁵ (if known) | | | |
| | | | | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------------|--------------------------|-------------------------|---------------------|--------------------------------------|--|--|--|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Office ³ | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| | | WO | 90/10935 | A1 | Pons | 09-20-1990 | | |
| | | WO | 90/14668 | A2 | Cravens | 11-29-1990 | | |
| | | WO | 91/01036 | A1 | Dufour | 01-24-1991 | | |
| | | WO | 91/08573 | A1 | Bush | 06-13-1991 | | |
| | | WO | 93/17437 | A1 | Bush | 09-02-1993 | | |
| | | WO | 94/10688 | A1 | Dufour | 05-11-1994 | | |
| | | WO | 94/14163 | A1 | McKubre | 06-23-1994 | | |
| | | WO | 94/15342 | A1 | McKubre | 07-07-1994 | | |
| | | WO | 95/20816 | A1 | Piantelli | 08-03-1995 | | |
| | | EP | 0 392 325 | A3 | Semiconductor Energy | 10-17-1990 | | |
| | | EP | 0 395 066 | A2 | Matsushita Electric Ind | 10-31-1990 | | |
| | | JP | 53-134792 | | Ind Res Inst Of Japan | 11-24-1978 | | X |
| | | JP | 56-136644 | | Hitachi | 03-28-1980 | | X |
| | | | | | | | | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3) ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| | | | | | |
|---|---|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 4 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Albagli, et. al., "Measurement and Analysis of Neutron and Gamma-Ray Emission Rates, Other Fusion Products, and Power in Electrochemical Cells Having Pd | |
| | | Alber, et. al., "Search for Neutrons from Cold Nuclear Fusion", Z. Phys. A - Atomic Nuclei, Vol. 333, 1989, pp. 319-320. | |
| | | Alessandrello, et. al., "Search for Cold Fusion Induced by Electrolysis in Palladium", Il Nuovo Cimento, Vol. 103A, No. 11, November 1990, pp. 1617-1638. | |
| | | Associated Press, "Panel Opposes Cold Fusion Efforts", The Washington Post, July 13, 1989, p. A14. | |
| | | The Associated Press, "Pennsylvania Company...Cold Fusion Mystery"; 1991, Lexis Nexis Reprint | |
| | | Associated Press, "Pysicist: Utah Cold-Fusion Gear Doesn't Work", The Washington Post, March 29, 1990, p. A3. | |
| | | Balke, et. al., "Limits on Neutron Emission From "Cold Fusion" in Metal Hydrides", Physical Review C, Vol. 42, No. 1, July 1990, pp. 30-37. | |
| | | Benetskii, et. al., "An Attempt to Observe Cold Thermonuclear Fusion in a Condensed Medium", 4, May 1989, Nuclear Research Institute, AS USSR, pp. 75-78. | |
| | | Besenbacher, et. al., "Search for Cold Fusion in Plasma-Charged Pd-D and Ti-D Systems", Journal of Fusion Energy, Vol. 9, No. 3, September 1990, pp. 315-317. | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

| | | | | | |
|---|---|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 5 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Bishop, "More Labs Report Cold Fusion Results", Wall Street Journal, Oct. 19, 1992. | |
| | | Bishop, "It ain't over til it's over ... Cold Fusion", Popular Science, Aug. 1993, pp. 47-51. | |
| | | Black Light Power, "Executive Summary", January 11, 1999, pp. 1-6. | |
| | | Boston Globe, Wednesday, April 19, 1989, "Successful nuclear fusion experiment by the Italians" | |
| | | Braaten, "Ridiculously Easy Test Yields Claim of Energy Triumph," The Washington Times, March 24, 1989, p. A5. | |
| | | Broad, "2 Teams Put New Life in Cold Fusion Theory", New York Times, April 26, 1991, p. A18. | |
| | | Browne, "Fusion Claims is Greeted With Scorn by Physicists", The New York Times, May 3, 1989, pp. A1 and A22. | |
| | | Browne, "Physicists Put Atom in 2 Places at Once", The New York Times. | |
| | | Bush, et. al., "Power in a Jar: the Debate Heats Up", 88 Bus. Week, Science & Technology, Oct. 26, 1992. | |
| | | Bush, et. al., "Helium Production During the Electrolysis...Experiments", J. Electroanal Chem., Vol. 304 (1991), pp. 271-278. | |
| | | Bush, et. al., "Helium Production During the Electrolysis...Experiments", Preliminary Note, Univ. of Texas, pp. 1-12. | |
| | | Catlett, et. al., "Hydrogen transport in lithium hydride as a function of pressure" The Journal of Chemical Physics, 58(8), 3432-3438 (April 1978). | |
| | | Chapline, "Cold Confusion", UCRL-101583, July 1989, pp. 1-9. | |
| | | Chien, et. al., "On an Electrode...Tritium and Helium", J. Electroanal Chem., 1992, pp. 189-212. | |
| | | Close, "Too Hot to Handle-The Race for Cold Fusion", Princeton University Press, 1989. | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

| | | | | | |
|---|---|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 6 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Cooke, ORNL/FTR-3341, July 31, 1989, pp. 2-15. | |
| | | Cribier, et. al., "Conventional Sources of Fast Neutrons in Cold Fusion Experiments", Physics Letters B, Vol. 228, No. 1, September 7, 1989, pp. 163-166. | |
| | | Criddle, "The Roles of Solution...Excess Heating", Electrochemical Science & Technology Centre, Univ. of Ottawa. | |
| | | Datz, et. al., "Molecular Association in Alkali Halide Vapors", Journal of Chemical Physics, vol. 34, no. 5, (Feb. 1961), pp.558-564. | |
| | | Dagani, "Cold Fusion-Utah Pressures Pons, Fleischmann", January 14, 1991, C&EN, pp. 4-5. | |
| | | Dagani, "Latest Cold Fusion Results Fail to Win Over Skeptics", June 14, 1993, C&EN, pp.38-40. | |
| | | Dagani, "New Evidence Claimed for Nuclear Process in 'Cold Fusion'", C&EN Washington, (April 1991), pp. 31-33 | |
| | | Experimental Verification by Idaho National Engineering Laboratory, pp. 13-25. | |
| | | Faller, et. al., "Investigation of Cold Fusion in Heavy Water", J. Radioanal. Nucl. Chem., Letter, Vol. 137, No. 1, August 21, 1989, pp. 9-16.; | |
| | | Hajdas, et. al., "Search for Cold-Fusion Events", Solid State Communications, Vol. 72, No. 4, 1989, pp. 309-313. | |
| | | Hardy, et. al., "The Volatility of Nitrates and Nitrites of the Alkali Metals", Journal of the Chemical Society, pp. 5130-5134 (1963). | |
| | | Hilts, "Significant Errors Reported in Utah Fusion Experiments," The Washington Post, May 2, 1989, pp. A1 and A7. | |
| | | Horanyi, "Some Basic Electrochemistry and the Cold Nuclear Fusion of Deuterium", J. Radioanal. Nucl. Chem., Letters, Vol. 137, No. 1, August 21, 1989, pp. 23-28. | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|---|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 7 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Huizenga, "Cold Fusion-The Scientific Fiasco of the Century", Oxford University Press, 1993 | |
| | | Huizenga, "Cold Fusion Labeled Fiasco of the Century", Forum for Applied Research and Public Policy, Vol. 7, no. 4, pp. 78-83. | |
| | | Jones, (article by Dagani), "Cold Fusion Believer Research", June 5, 1995, C&EN, pp. 34-41. | |
| | | Jones, "Current Issues in Cold Fusion ... Particles", Surface and Coatings Technology, 51 (1992), pp. 283-289. | |
| | | Jones, et. al., "Faradic Efficiencies ... Cells", J. Phys. Chem. 1995, pp. 6973-6979. | |
| | | Jones, et. al., "Examination of Claims of Miles ... Experiments", J. Phys. Chem. 1995, pp. 6966-6972. | |
| | | Ivanco, et. al., "Calorimetry For a Ni/K ₂ CO ₃ Cell", AECL Research, June 1994. | |
| | | Kahn, "Confusion in a Jarr", Nova 1991. | |
| | | Karabut, et. al., "Nuclear Product...Deuterium", Physics Letters A170, (1992), pp. 265-272. | |
| | | Klein, "Attachments to Report of Cold Fusion Testing", Cold Fusion, No. 9, pp. 16-19. | |
| | | Kreysa, et. al., "A Critical Analysis of Electrochemical Nuclear Fusion Experiments", J. Electroanal. Chem., Vol. 266, 1989, pp. 437-450. | |
| | | Labov, "Spectral Observations...Background", The Astrophysical Journal, 371, April 20, 1991, pp. 810-819. | |
| | | Leggett, et. al., "Exact Upper Bound...'Cold Fusion'", Physical Review Letters, Vol. 63, No. 2, (July 1989), pp. 190-194 | |
| | | Lehigh X-Ray Photoelectron Spectroscopy Report, December 8, 1993. | |
| | | Lewis, et. al., "Searches for Low-Temperature Nuclear Fusion of Deuterium in Palladium", Nature, Vol. 340, August 17, 1989, pp. 525-530. | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|---|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 8 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Maly, et. al., "Electron Transitions on Deep Dirac Levels I", ANS Reprint, Fusion Technology, Vol. 24, (Nov. 1993), pp. 307-318. | |
| | | McNally, "On the Possibility of a Nuclear Mass-Energy Resonance in D + D Reactions at Low Energy", Fusion Technology, Vol. 16, No. 2, September 1989, pp. 237-239. | |
| | | Miles, et. al., "Search for Anomalous Effects... Palladium Cathodes", Naval Air Warfare Center Weapons Division, Proceedings of 3 rd Int. Conf. on Cold Fusion, Nagoya, Japan, (Oct. 1992), pp. 21-25. | |
| | | Miles et al, "Correlation of Excess...Palladium Cathodes", J. Electronl. Chem., 1993, pp. 99-117. | |
| | | Miles et al, "Heat and Helium...Experiments", Conference Proceedings, Vol. 33, 1991, pp. 363-372. | |
| | | Miles et al, "Electrochemical...Palladium Deuterium System", J. Electroanal Chem., 1990, pp. 241-254. | |
| | | Mills, et al, "Dihydrino Molecule Identification", Fusion Technology, Vol. 25, Jan., 1994, pp 103-119. | |
| | | Mills, et. al., "Fractional Quantum...Hydrogen", Fusion Technology, Vol. 28, Nov. 1995, pp. 1697-1719. | |
| | | Mills, et. al., "Excess Heat Production...Cold Fusion", Fusion Technology, Vol. 20, Feb. 1991, pp. 65-81. | |
| | | Mills, Unification of Spacetime, the Forces, Matter, Energy, HydroCatalysis Power Corporation, 1992, pp. 53-84. | |
| | | Mills, "The Grand Unified Theory of Classical Quantum Mechanics", pp. 1-9 | |
| | | Mills, "Hydrocatalysis Power Technology", Statement of Dr. Randell L. Mills, May, 1993. | |
| | | Mills Technologies, "1KW Heat Exchanger System", Thermacore, Inc., Oct. 11 1991, pp. 1-6 | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|---|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 9 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Mills Technologies, "1KW Heat Exchanger System", Thermacore, Inc., April 17, 1992, pp. 1-6 | |
| | | Miskelly, et. al., "Analysis of the Published Calorimetric Evidence for Electrochemical Fusion of Deuterium in Palladium", Science, Vol. 246, No. 4931, November 10, 1989, pp. 793-96. | |
| | | Monroe, et. al., "A Schrodinger Cat Superposition State of an Atom", Science, Vol. 272, (May 24, 1996), pp 1131-1101. | |
| | | Morrison, "Review of Progress in Cold Fusion", Transactions of Fusion Technology, Vol. 26, Dec. 1994, pp. 48-55. | |
| | | Morrison, "Cold Fusion Update No. 12, ICCPG", Jan. 17, 1997, available online at "www.skypoint.com". | |
| | | Niedra, "Replication of the Apparent Excess Heat Effect in Light Water ... Cell", NASA Technical Memorandum 107167, (Feb. 1996). | |
| | | Nieminen, "Hydrogen atoms band together", Nature, Vol. 356, 26 March 1992, pp. 289-291. | |
| | | Noninski, et. al., "Determination...Heavy Water", Fusion Technology, 1990, Vol. 19, pp. 365-367. | |
| | | Noninski, "Excess Heat During the Electrolysis of a Light Water...Nickel Cathode", Fusion Technology, Vol. 21, March 1992, pp. 163-167. | |
| | | Notoya, et. al., "Excess Heat Production in Electrolysis ... Electrodes", Proceedings of the Int. Conf. on Cold Fusion, Oct. 21-25, 1992, Tokyo, Japan. | |
| | | Notoya, "Cold Fusion ... Nickel Electrode", Fusion Technology, Vol. 24, pp. 202-204 (1993). | |
| | | Notoya, "Tritium Generation ... Nickel Electrodes", Fusion Technology, Vol. 26, pp. 179-183 (1994). | |
| | | Ohashi, et al, "Decoding of Thermal Data in Fleischmann & Pons Paper", J. of Nucl. Sci.. & Tech., Vol. 26, No. 7, July 1989, pp. 729-732. | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|----|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 10 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|--|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Oka, et. al., "D ₂ O-fueled fusion power reactor using electromagnetically induced D-D _n , D-D _p , and Deuterium-tritium reactions-preliminary design of a reactor system", Fusion Technology, Vol. 16, No. 2, September 1989, pp. 263-267. | |
| | | Ohmori, et. al., "Excess Heat Evolution ... Tin Cathodes" Fusion Technology, Vol. 24, pp. 293-295 (1993). | |
| | | Price, et. al., "Search for Energetic-Charged Particle Emission from Deuterated Ti and Pd Foils", Physical Review Letters, Vol. 63., No. 18, pp. 1926-1929 (10/30/1989). | |
| | | Rees, "Cold Fusion...What Do We Think?", Journal of Fusion Energy, (1991), Vol. 10, No. 1, pp. 110-116. | |
| | | Rogers, "Isotopic hydrogen fusion in metals", Fusion Technology, Vol. 16, No. 2, September 1989, pp. 2254-259. | |
| | | Rousseau, "Case Studies in Pathological Science", Vol. 80, American Scientist, (1992), pp. 54-63. | |
| | | Rout, et. al., "Phenomenon of Low Energy Emissions from Hydrogen/Deuterium Loaded Palladium", 3 rd Annual Conference on Cold Fusion (Oct. 21-25, 1992). | |
| | | Salamon, et. al., "Limits ... Electrolytic Cells", Nature, Vol. 344, March 29, 1990, pp. 401-405. | |
| | | Schrieder, et. al., "Search for Cold Nuclear Fusion in Palladium-Deuterium", Z. Phys. B-Condensed Matter, Vol. 76, No. 2, 1989, pp. 141-142. | |
| | | Service, "Cold Fusion:Still Going", Newsweek Focus, July 19, 1993. | |
| | | Shani, et. al., "Evidence for a Background Neutron Enhanced Fusion in Deuterium Absorbed Palladium", Solid State Communications, Vol. 72, No. 1, 1989, pp. 53-57. | |
| | | Shaubach, et. al., "Anomalous Heat...Carbonate", Thermacore, Inc., pp. 1-10. | |
| | | Srinivasan, et. al., "Tritium and Excess Heat Generation during Electrolysis of Aqueous Solutions of Alkali Salts with Nickel Cathode", 3 rd Annual Conference on Cold Fusion (Oct. 21-25, 1992). | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|----|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 11 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Stein, "Theory May Explain Cold Fusion Puzzle", Lexis Reprint, Washington News, April 25, 1991. | |
| | | Storms, et. al., "Electrolytic Tritium Production", Fusion Technology, Vol. 17, July 1990, pp. 680-695. | |
| | | Stripp, "Georgia Group Outlines Errors That Led to Withdrawal of Cold Fusion Claims", The Wall Street Journal, April 26, 1989, p. B4. | |
| | | Suplee, "Two New Theories on Cold Fusion...Scientists"; The Washington Post 1 st Section, p. A11, (1991). | |
| | | Taubes, "Bad Science", Random House, 1993, pp. 303, 425-481. | |
| | | Vaselli et al., "Screening Effect of Impurities in Metals: A possible Explanation of the Process of Cold Nuclear Fusion", 11 Nuovo Cimento Della Societa Italiana di Fisica, Vol. 11D, No. 6, June 1989, (Bologna, Italy), pp. 927-932. | |
| | | Williams, "Upper Bounds on Cold Fusion in Electrolytic Cells", Nature, vol. 342, 23 November 1989, pp. 375-384. | |
| | | Yamaguchi et al, "Direct Evidence...Palladium", NTT Basic Research Laboratories, (1992) pp. 1-10. | |
| | | Ziegler, et. al., "Electrochemical Experiments in Cold Nuclear-Fusion", Physical Review Letters, Vol. 62, No. 25, June 19, 1989, pp. 2929-2932. | |
| | | Zweig, "Quark Catalysis of Exothermal Nuclear Reactions", Science, Vol. 201, (1978), pp. 973-979. | |
| | | Fleming et al., "Calorimetric Studies of Electrochemical Incorporation of Hydrogen Isotopes into Palladium", J. of Fusion Energy, vol. 9, No. 4, (Dec. 1990), pp. 517-524 | |
| | | Broad, "Cold Fusion Claim is Faulted on Ethics as Well As Science" New York Times, (March 17, 1991) pp. 1 and 30 | |
| | | Taubes, "Cold Fusion Conundrum At Texas A&M", Science, Vol. 248, (June 15, 1990), pp. 1299-1304 | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|----|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 12 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Henderson et al., "More Searches for Cold Fusion", J. of Fusion Energy, Vol. 9, No. 4, (December, 1990), pp. 475-477 | |
| | | Bosch et al., "Electrochemical Cold Fusion Trials At IPP Garching", J. of Fusion Energy, Vol. 9, No. 2, (June 1990), pp. 165-186 | |
| | | Rogers et al., "Cold Fusion Reaction Products and Their Measurement", J. of Fusion Energy, Vol. 9, No. 4, (December 1990), pp. 483-485 | |
| | | Albagli, et al., "Measurement and Analysis of Neutron and Gamma-ray Emission Rates...", J. of Fusion Energy, Vol. 9, No. 2, (June 1990), pp. 133-148 | |
| | | Myers et al. "Search for Cold Fusion at D/Pd > 1 Using Ion Implantation", J. of Fusion Energy, Vol. 9, No. 3, (1990) pp. 30-37 | |
| | | Wilson et al., "Analysis of experiments on the calorimetry of LiOD-D ₂ O electrochemical cells", J. of Electroanalytical Chemistry, Vol. 332, Nos. 1 and 2, (August 14, 1992) pp. 1-31 | |
| | | Silvera et al., "Deuterated palladium at temperatures from 4.3 to 400 K and pressures to 105 kbar: Search for cold fusion", Physical Review B, Vol. 42, No. 14, (November 15, 1990) pp. 9143-9146 | |
| | | Ewing et al., "A sensitive Multi-detector Neutron Counter...", IEEE transactions on Nuclear Science, Vol. 37, No. 3, (June 1990) pp. 1165-1170 | |
| | | Hadfield, "Lukewarm reception for Japanese cold fusion", New Scientist, (October 31, 1992) Page 10 | |
| | | Taylor et al., "Search for neutrons from deuterated palladium subject to high electrical currents", LA-UR 94-970 (May 4, 1994), pp. 1-11 | |
| | | Huizenga, "Cold Fusion", C & EN Vol. 70, (July 20, 1992) Page 3 | |
| | | Huizenga, abstract from "New developments in the cold fusion saga" Abstracts of papers of the American Chemical Society, Vol. 207 (March 13, 1994), page 6 | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|----|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 13 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Dagani, "Cold fusion believer turned skeptic crusades for more rigorous research", C & EN (June 5, 1995) pp 34-35, 38 and 40 | |
| | | Morrison, "Review of cold fusion" Sov. Phys. Usp. 34, (December 1991) pp.1055-1060 | |
| | | Morrison, "Comments on claims of excess enthalpy by Fleischmann and Pons using simple cells made to boil", Physics Letters A, Vol. 185, (February 1994) pp. 498-502 | |
| | | Merriman et al., "An attempted replication of the CETI cold fusion experiment" pages 1-17 available at http://www.math.ucla.edu/~barry/CF/CETIX.html | |
| | | "Italy-Cold Fusion & Judge's Verdict" (1996), pp. 1-3, available at http://www.padrak.com/ine/CFLIBEL.html | |
| | | Miller, Memo from Bennett Miller to Dr. Robert W. Bass, dated October 9, 1997, pp. 1-10 | |
| | | Morrison, "Cold Fusion Update No. 10, dated April 1, 1995, available at http://www.skypoint.com/members/jlogajan/files/morrison.txt , pp.1-8 | |
| | | Shelton et al., "An assessment of claims of 'excess heat' in 'cold fusion' calorimetry", Thermochimica Acta 297 (1997), pp. 7-15 | |
| | | Shkedi et al., "Calorimetry, excess heat and Faraday efficiency...", Fusion Technology, Vol. 28 (November 1995) pp. 1720-1731 | |
| | | "EarthTech's Campaign to Replicate one of the BackLight Power Excess Heat Results --20 DEC97, available at : http://www.eden.com/~little/blp/prelim.html , pp.1-41 | |
| | | Jones, "Serious Flaws in Patterson (SOFE '95) Demo on Cold Fusion", available at: http://x7.dejanews.com | |
| | | Blue, "Cold Fusion Lies #6", pages 1, 2, available at: http://x7.dejanews.com | |
| | | Blue, "Randell Mills' sells pot shards" pages 1, 2, available at: http://x7.dejanews.com | |
| | | Briars, "Critique of "New Energy, New Physics" story, pp. 1-9, available at: http://x7.dejanews.com | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|---|----|----|----|--------------------------|--------------|
| Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 09/110,678 |
| | | | | Filing Date | July 7, 1998 |
| | | | | First Named Inventor | Mills |
| | | | | Group Art Unit | Unknown |
| | | | | Examiner Name | Unknown |
| Sheet | 14 | of | 14 | Attorney Docket Number | 62-226-8AC |

| OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS | | | |
|---|--------------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | Fusion Digest, "Cold Nuclear Fusion Bibliography", 1993 | |
| | | Fusion Digest, "Heat? Neutrons? Charged Particles?", 1993 | |
| | | Brodowsky, "Solubility and diffusion of hydrogen and deuterium in palladium and palladium alloys", Technical Bulletin, Engelhard Indust., vol. 7, no. 1-2 (1966), pp. 41-50. | |
| | | Prop. to the United Press, "Theory May Explain 'Cold Fusion' Puzzle"; 1991; Lexis Nexis Reprint | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.